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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,296	04/23/2001	Yoshinori Aoyagi	122638/00	2997
7590	04/02/2004		EXAMINER	
McGinn & Gibb, PLLC 8321 Old Courthouse Road, Suite 200 Vienna, VA 22182-3817			NGUYEN, HOAN C	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Office Action Summary	Application No.	Applicant(s)	
	09/839,296	AOYAGI ET AL.	
	Examiner	Art Unit	
	HOAN C. NGUYEN	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
2a) This action is **FINAL**. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 7-24 is/are pending in the application.
 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
5) Claim(s) 7,11 and 23 is/are allowed.
6) Claim(s) 8-10, 12-22 and 24 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) The translation of the foreign language provisional application has been received.
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) Other: _____

DETAILED ACTION

Response to Amendment

Applicant's arguments with respect to Amended claims 7, 11-13 and New claims 14-24 have been considered but are moot in view of the new ground(s) of rejection. Therefore, this is Final action.

Applicant cancelled claims 1-6.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation "forming the electrodes, the spacers, the color filter and thewitching elements on or along "irregular surface" (rough surface) in claims 8, 9, 15, 16, 18, 21 and 24 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 8-10, 12-22 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. **In a response of last office action, applicant fails to respond to the 112 rejection of failing to comply with the non-enablement requirement.**

Therefore, this 112 rejection is repeated here.

- There is no Figure showing **the electrodes, the spacers, the color filter and the witching elements** formed on "irregular surface" including line -shaped protrusions as cited in claims 8, 9, 15, 16, 18, 21 and 24. Fig. 7 shows only CONVENTIONAL LCD with the electrodes, color filters, the spacer and the witching elements formed on the flat surface, which does not include line-shaped protrusions.
- Specification **does not disclose any step of forming the electrodes, the spacers, the color filter and the witching elements** on or along "irregular surface" (rough surface) including line-shaped protrusions without using a planarization layer. Applicant should include clearly all steps of manufacture in both the specification and the method claims.

There is no known or conventional technique of forming the electrodes, the spacers, the color filter and the witching elements on or along "irregular

surface" (rough surface or curved surface as shown in Figs. 1B, 2B, 3B, 4B) including line-shaped protrusions without a planarization layer. Therefore, the **claims 8-10, 15, 16, 18, 21 and 24 may become non-enable** if applicants do not include the steps of how to form the electrodes, the spacers, the color filter and thewitching elements on "irregular surface" including line-shaped protrusions.

Although the dependent claims 8-10, 15, 16, 18, 21 and 24 depend on the allowable claims. But these claims are not supported in the original specification for manufacturing steps, which are not conventional.

However, applicants should beware that these including steps may be New Subject Matter.

Claims 12-14, 17-20 and 22 are rejected since it depends on infinitive claim.

Allowable Subject Matter

Claims 7, 11 and 23 are allowed. The following is an examiner's statement of reasons for allowance:

Claims 7, 11 and 23 are allowed since there is no prior art teaches a method of manufacturing a LCD device comprising:

- Cutting apart a first rectangular substrate from a first raw glass substrate such that a longer side direction of a first rectangular substrate is coincident with a drawing direction of the first raw glass substrate.
- Cutting apart a second rectangular substrate from a second raw glass substrate such that a longer side direction of a first rectangular substrate becomes orthogonal (perpendicular) to a drawing direction of the second raw glass substrate.

wherein line-shaped protrusions along a drawing direction of the first and second raw glass substrates.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

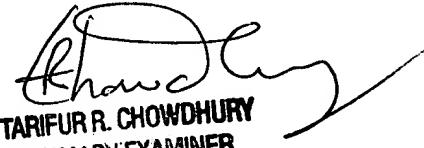
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (571) 272-2296. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

HOAN C. NGUYEN
Examiner
Art Unit 2871

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TARIFUR R. CHOWDHURY
PRIMARY EXAMINER